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U.S. PATENT DOCUMENTS

Examiner's Initial	Document Number	Date	Name	Class/ Sub-class
<i>MLY</i>	3,734,597	5/22/1973	Churchill et al.	350/160 LC
	3,873,185	3/25/1975	Rogers	350/147
	4,356,429	10/26/1982	Tang	313/503
	4,704,559	11/3/1987	Suginoya et al.	315/169.1
	4,806,212	2/21/1989	Wessling et al.	204/130
	4,940,640	7/10/1990	MacDiarmid	429/213
	5,121,029	6/9/1992	Hosokawa et al.	313/504
	5,254,633	10/19/1993	Han et al.	525/327.4
	5,336,546	8/9/1994	Hironaka et al.	428/209
	5,458,977	10/17/1995	Hosokawa et al.	428/411.1
	5,486,406	1/23/1996	Shi	428/209
	5,514,878	5/7/1996	Holmes et al.	257/40
	5,554,450	9/10/1996	Shi et al.	428/690
	5,585,561	12/17/1996	Bahl et al.	73/504.16
	5,597,890	1/28/1997	Jenekhe	528/397
	5,601,903	2/11/1997	Fujii et al.	428/212
	5,604,398	2/18/1997	Zyung et al.	313/506
	5,652,067	7/29/1997	Ito et al.	428/690
	5,698,858	12/16/1997	Börner	250/484.2
	5,702,833	12/30/1997	Nagai et al.	428/690
	5,712,361	1/27/1998	Stern et al.	528/86
	5,719,467	2/17/1998	Antoniadis et al.	313/506
	5,804,100	9/8/1998	Angelopoulos et al.	252/521
	5,955,834	9/21/1999	Epstein et al.	313/501
	6,004,681	12/21/1999	Epstein et al.	428/457
	6,235,414	5/22/2001	Epstein et al.	428/690
<i>MLY</i>	6,623,870	9/23/2003	Epstein et al.	428/690

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FOREIGN PATENT DOCUMENTS

Examiner's Initial	Document Number	Date	Name	Translation yes/no
MEJ	AU 711694	2/3/2000 2/1/98	Epstein et al.	N/A
1	AU 712433	2/47/2000 2/1/98	Epstein et al.	N/A
	AU 735823	11/1/2001 9/1/98	Epstein et al.	N/A
	AU 738209	1/3/2002 2/1/98	Epstein et al.	N/A
	CA 2,262,925	3/26/2002	Wang et al.	N/A
	CA 2,262,929	10/7/2003	Epstein et al.	N/A
	CA 2,279,330	5/25/2004	Epstein et al.	N/A
	EP 0745658 A1	12/4/1996	Wildeman et al.	N/A
	EP 0553950 A2	8/4/1993	Egusa et al.	N/A
	JP 3-273087	12/4/1991	Nakano et al.	Yes (abstract)
	JP 3526877 B2	5/17/2004	Wang et al.	No
	WO 96/26830	9/6/1996	Epstein et al.	N/A
	WO 96/29747	9/26/1996	Epstein et al.	N/A
	WO 98/05693	2/12/1998	Epstein et al.	N/A
	WO 98/05494	2/12/1998	Epstein et al.	N/A
	WO 98/06122	2/12/1998	Epstein et al.	N/A
MEJ	WO 98/41065	2/47/1998 9/1/98	Epstein et al.	N/A

OTHER DOCUMENTS

Examiner's Initial	Document
MEJ	Berggren, M. et al., Nature, 372, pp. 444, 446 (December 1994).
	Blatchford, J.W., Ph.D. thesis, The Ohio State University, 238 pages (1996).
	Blatchford, J.W. et al., Physical Review B, 54, pp. 9180-9189 (October 1996).
	Blatchford, J.W. et al., Mat. Res. Soc. Symp. Proc., 413, pp. 671-676 (1996).
	Blatchford, J.W. et al., J. Chem. Phys., 105, pp. 9214-9226 (November 1996).
	Blatchford, J.W. et al., Am. J. Phys., 64, pp. 120-135 (February 1996)
	Blatchford, J.W. et al., Physical Review Letters, 76, pp. 1513-1516 (February 1996).
	Blatchford, J.W. et al., Physical Review B., Rapid Communications, 54, pp. R3683-R3686 (August 1996).
	Blatchford, J.W. et al., Time Resolved Vibrational Spectroscopy VII, 5 pages, (1997).
MEJ	Bradley, D.D.C., Synthetic Metals, 54, pp. 401-415 (1993).

Marie R. Yamnitzky 02/15/2005
7

MEY	Braun, D. et al., Appl. Phys. Lett., 58, pp. 1982-1984 (1991).
1	Brown, A.R. et al., Appl. Phys. Lett., 61, pp. 2793-2795 (December 1992).
	Burroughes, J.H. et al., Nature, 347, pp. 539-541 (October 1990).
	Diaz-Garcia, M.A. et al., Appl. Phys. Lett., 70, pp. 3191-3193 (June 1997).
	Diaz-Garcia, M.A. et al., "Semiconducting polymers as a new class of solid-state laser materials", 8 pages, source and publication date not given.
	Epstein, A.J. et al., Synthetic Metals, 78, pp. 253-261 (1996).
	Epstein, A.J. et al., Macromol. Symp., 116, pp. 27-38 (1997).
	Epstein, A.J. et al., Polymer Preprints, 37, pp. 133-134 (1996).
	Frolov, S.V. et al., "Cooperative Emission In .pi.-conjugated Polymer Thin Films", 14 pages, source and publication date not given.
	Fu, D.K. et al., Tetrahedron, 53, pp. 15487-15494 (1997).
	Gebler, D.D. et al., J. Appl. Phys., 78, pp. 4264-4266 (September 1995).
	Gebler, D.D. et al., Appl. Phys. Lett., 70, pp. 1644-1646 (March 1997).
	Gebler, D.D. et al., J. Appl. Phys., 78, pp. 1-3 (September 1995).
	Gebler, D.D. et al., Synthetic Metals, 85, pp. 1205-1208 (1997).
	Greenham, N.C. et al., Nature, 365, pp. 628-630 (October 1993).
	Grem, G. et al., Adv. Mater., 4, pp. 36-37 (1992).
	Gruner, J. et al., Adv. Mater., 6, pp. 748-752 (1994).
	Hamaguchi, M. et al., Appl. Phys. Lett., 69, pp. 143-145 (July 1996).
	Hamaguchi, M. et al., Jpn. J. Appl. Phys., 35, pp. L1462-L1464 (November 1996).
	Hu, B. et al., J. Appl. Phys., 76, pp. 2419-2422 (August 1994).
	Jenekhe, S.A. et al., Adv. Mater., 7, pp. 309-311 (1995).
	Jenekhe, S.A. et al., Science, 265, pp. 765-768 (August 1994).
	Jessen, S.W. et al., "Direct and Photoinduced Absorption in Poly(p-pyridyl vinylene): Morphological Control of Triplet Excitons and Polarons", pp. 0-11 (unpublished).
	Jessen, S.W. et al., Polymeric Material Science & Engineering, 72, pp. 573-574 (1995).
	Jessen, S.W. et al., Proc. Soc. of Plastics Engineers Annual Technical Conference, pp. 1433-1436 (May 1996).
	Jessen, S.W. et al., Synthetic Metals, 84, pp. 501-506 (1997).
	Kido, J., TRIP, 2, pp. 350-355 (October 1994).
	MacDiarmid, A.G. et al., SPIE, 2528, pp. 2-12 (1995).
	MacDiarmid, A.G. et al., IS&T's 49th Annual Conference, pp. 381-384 (1996).
	MacDiarmid, A.G. et al., Mat. Res. Soc. Symp. Proc., 413, pp. 3-12 (1996).
	MacDiarmid, A.G. et al., Proc. Summer Topical Meetings, 2 pages (August 1995).
	MacDiarmid, A.G. et al., Proceedings Multifunctional Polymers Workshop, 4 pages (January - February 1996).
	MacDiarmid, A.G. et al., Proceedings of Society of Photo-Optic Instrumentation and Engineering, 11 pages (July 1995).
MEY	MacDiarmid, A.G. et al., Proc. Soc. of Plastics Engineers Annual Technical Conference, pp. 1314-1317 (May 1996).

Marie R. Yamintsky, 02/15/2005

MEY	Marsella, M.J. et al., Adv. Mater., 7, pp. 145-147 (1995).
	Miyamae, T. et al., J. Chem. Phys., 103, 2738-2744 (1995).
	Mori, T. et al., Appl. Phys. Lett., 69, pp. 3309-3311 (November 1996).
	Ohmori, Y. et al., Jpn. J. Appl. Phys., 31, pp. L568-L570 (1992).
	Ohmori, Y. et al., Sol. St. Comm., 80, pp. 605-608 (1991).
	Onoda, M., J. Appl. Phys., 78, pp. 1327-1333, (July 1995).
	Osaheni, J.A. et al., Macromol., 27 pp. 739-742 (1994).
	Parker, I.D., J. Appl. Phys., 75, pp. 1656-1666 (February 1994).
	Parker, I.D. et al., Appl. Phys. Lett., 65, pp. 1272-1274 (September 1994).
	Partridge, R.H., Polymer, 24, pp. 733-768 (June 1983).
	Pei, Q. et al., Science, 269, pp. 1086-1088 (August 1995).
	Pope, M. et al., "Electronic Processes in Organic Crystals", Oxford University Press, New York, pp. 739 (1982).
	Quillard, S. et al., Nonlinear Optics, 10, pp. 253-262 (1995).
	Rothberg, L., Nature, 37, pp. 518-519 (October 1990).
	Scherf, U. et al., Makromol. Chem., Rapid Commun., 12, 498-497 (1991).
	Scherf, U. et al., Advances in Polymer Science, 123, pp. 1-40 (1995).
	Scherf, U. et al., Synthesis, pp. 23-38 (January/February 1992).
	Tang, C.W. et al., Appl. Phys. Lett., 51, pp. 913-915 (September 1987).
	Tian, J. et al., Chem. Mater., 7, pp. 2190-2198 (1995).
	Vestweber, H. et al., Adv. Mater., 4, pp. 661-662 (1992).
	Wang, H.L. et al., Polymer Preprints, 36, pp. 45-46 (1995).
	Wang, H.L. et al., Synthetic Metals, 78, pp. 33-37 (1996).
	Wang, Y.Z. et al, SPIE-The International Society for Optical Engineering, 2528, pp. 54-61 (July 1995).
	Wang, Y.Z. et al., Appl. Phys. Lett., 68, pp. 894-896 (February 1996).
	Wang, Y.Z. et al., Mat. Res. Soc. Symp. Proc., 413, pp. 115-120 (1996).
	Wang, Y.Z. et al., Proc. Soc. of Plastics Engineers Annual Technical Conference, pp. 1327-1331 (1996).
	Wang, Y.Z. et al., Appl. Phys. Lett., 70, pp. 3215-3217 (June 1997).
	Wang, Y.Z. et al., "Light-Emitting Devices Based on Pyridine-Containing Conjugated Polymers", 4 pages (1996).
	Wang, Y.Z. et al., Synthetic Metals, 85, pp. 1179-1182 (1997).
	Wang, Y.Z. et al., Proc. Soc. of Plastics Engineers Annual Technical Conference, 4 pages (July-August 1997).
	Weaver, M.S. et al., Thin Solid Films, 273, pp. 39-47 (1996).
	www.chem.ed.ac.uk/leigh/home/rotoeatintro.html (01/04/04)
	Wei, X.L. et al., J. Am. Chem. Soc., 118, pp. 2545-2555 (1996).
	Whittman, H.F. et al., Adv. Mater., 7, pp. 541-544 (1995).
	Yamamoto, T. et al., Chemistry Letters, pp. 153-154 (1988).
	Yamashita, K. et al., 1996 Autumn 57 th JSAP Annual Meeting Digest III, 7p-ZM-1, pp. 984 (September 1996).
	Yang, Y. et al., J. Appl. Phys. 79, pp. 934-939, (January 1996).
	Yang, Y. et al., J. Appl. Phys., 77, pp. 694-698 (January 1995).
	Yang, Y. et al., Appl. Phys. Lett., 68, pp. 2708-2710 (May 1996).
MEY	Rotaxanes and Catenanes. An Introduction to Rotaxanes and Catenanes [online]. © 2003 [retrieved on 01-04-2004]. Retrieved from the Internet < URL: http://www.chem.ed.ac.uk/leigh/home/rotoeatintro.html >.

Marie L. Yamnitsky

02/15/2005

10/649, 056
EPSTEIN et al.
page 5 of 5

MRV	Yang, Y. et al., Appl. Phys. Lett., 64, pp. 1245-1247 (March 1994).
MRV	Zhang, C. et al., Synthetic Metals, 62, pp. 35-40 (1994).

Examiner	Marie R. Yamnitzky	Date Considered	02/15/2005
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